



# INDOFINE Chemical Company, Inc.

121 Stryker Lane, Bldg. 30, Suite 1 • Hillsborough, NJ 08844 • U.S.A.

Phone: (908) 359-6778 • FAX: (908) 359-1179

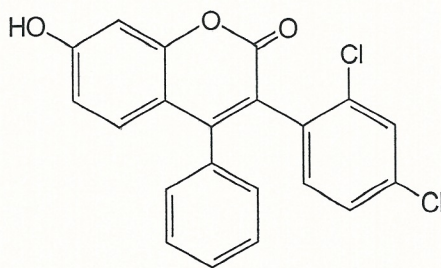
website: [www.indofinechemical.com](http://www.indofinechemical.com)

e-mail: [chemical@indofinechemical.com](mailto:chemical@indofinechemical.com)

## CERTIFICATE OF ANALYSIS

Cat. No.: 19-097

<u>Product:</u>	3(2',4'-DICHLOROPHENYL)-7-HYDROXY-4-PHENYL COUMARIN
<u>Lot No.:</u>	99052
<u>Chemical Formula:</u>	C <sub>21</sub> H <sub>12</sub> Cl <sub>2</sub> O <sub>3</sub>
<u>Molecular Weight:</u>	383.23
<u>Melting Point:</u>	264-265°C
<u>Appearance:</u>	Yellow powder
<u>Solubility:</u>	Soluble in DMSO
<u>TLC:</u>	Hexane: Ethyl acetate (7:3)
<u>NMR Spectrum:</u>	Enclosed
<u>Storage:</u>	Store in cool, dry place
<u>Purity (HPLC):</u>	99.06%





# INDOFINE Chemical Company, Inc.

121 Stryker Lane, Bldg. 30, Suite 1 • Hillsborough, NJ 08844 • U.S.A.

Phone: (908) 359-6778 • FAX: (908) 359-1179

website: [www.indofinechemical.com](http://www.indofinechemical.com)

e-mail: [chemical@indofinechemical.com](mailto:chemical@indofinechemical.com)

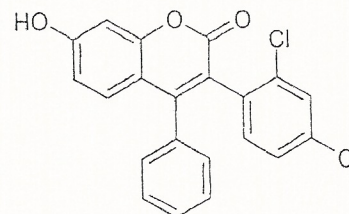
## HPLC ANALYSIS

Catalog no.: 19-097

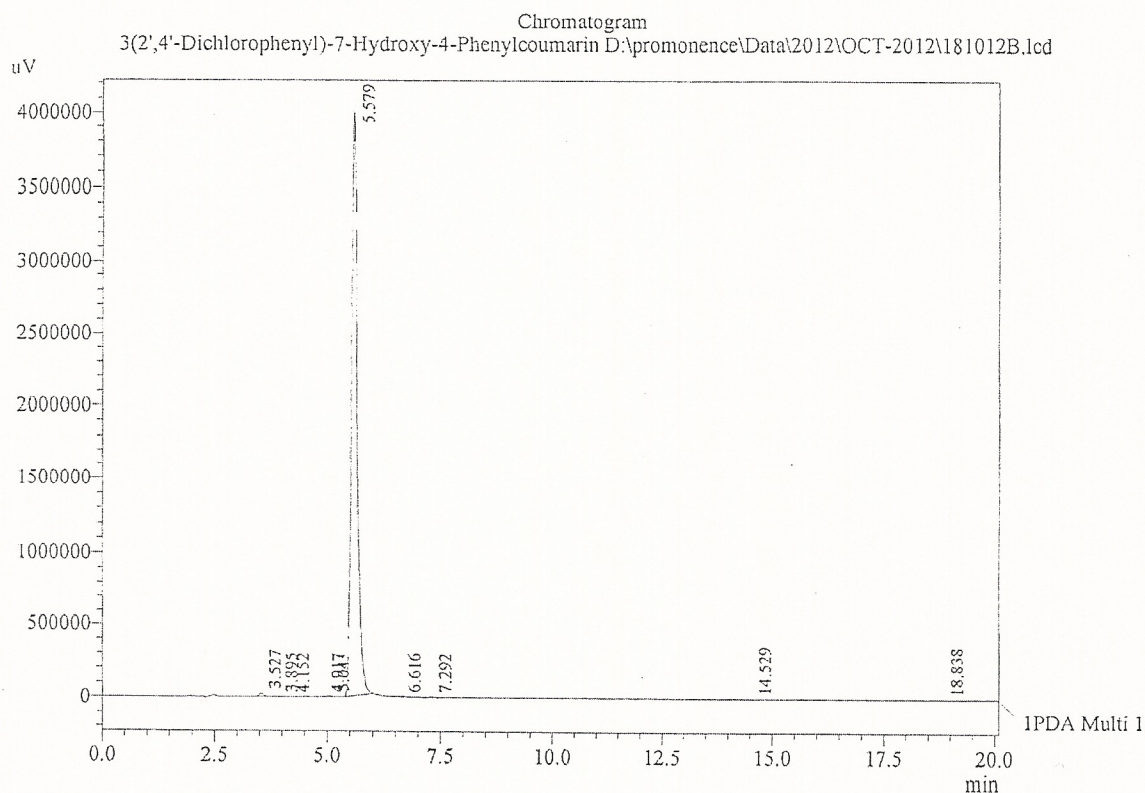
Product name: 3(2',4'-Dichlorophenyl)-7-hydroxy-4-phenylcoumarin

Lot No.: 99052

Sample Name : 3(2',4'-Dichlorophenyl)-7-Hydroxy-4-Phenylcoumarin  
Sample ID : Lot NO-99052  
Injection Volume : 20 uL  
Data Filename : 181012B.lcd  
Method Filename : Linear Isocratic.M.lcm



Column : LUNA C-18(2), (250mm x4.6mm 5.0μ)  
Flow : 1.000 mL/min.  
Mobile Phase : A(20% of 0.05% TFA in water) B(80% of Acetonitrile)



1 PDA Multi 1 / 220nm 4nm

PeakTable

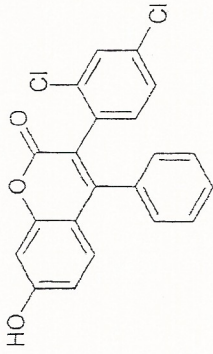
PDA Ch1 220nm 4nm

Peak#	Name	Ret. Time	Area	Area %	Relative Retention Time
1	RT:3.527	3.527	166240	0.46	0.63
2	RT:3.895	3.895	6202	0.02	0.70
3	RT:4.152	4.152	11065	0.03	0.74
4	RT:4.917	4.917	10358	0.03	0.88
5	RT:5.041	5.041	70164	0.19	0.90
6	RT:5.579	5.579	36179535	99.06	1.00
7	RT:6.616	6.616	9419	0.03	1.19
8	RT:7.292	7.292	38277	0.10	1.31
9	RT:14.529	14.529	13766	0.04	2.60
10	RT:18.838	18.838	18649	0.05	3.38
Total			36523675	100.00	



**INDOFINE Chemical Company, Inc.**  
 121 STRYKER LANE  
 BLDG. 30, SUITE 1  
 HILLSBOROUGH, NJ 08844

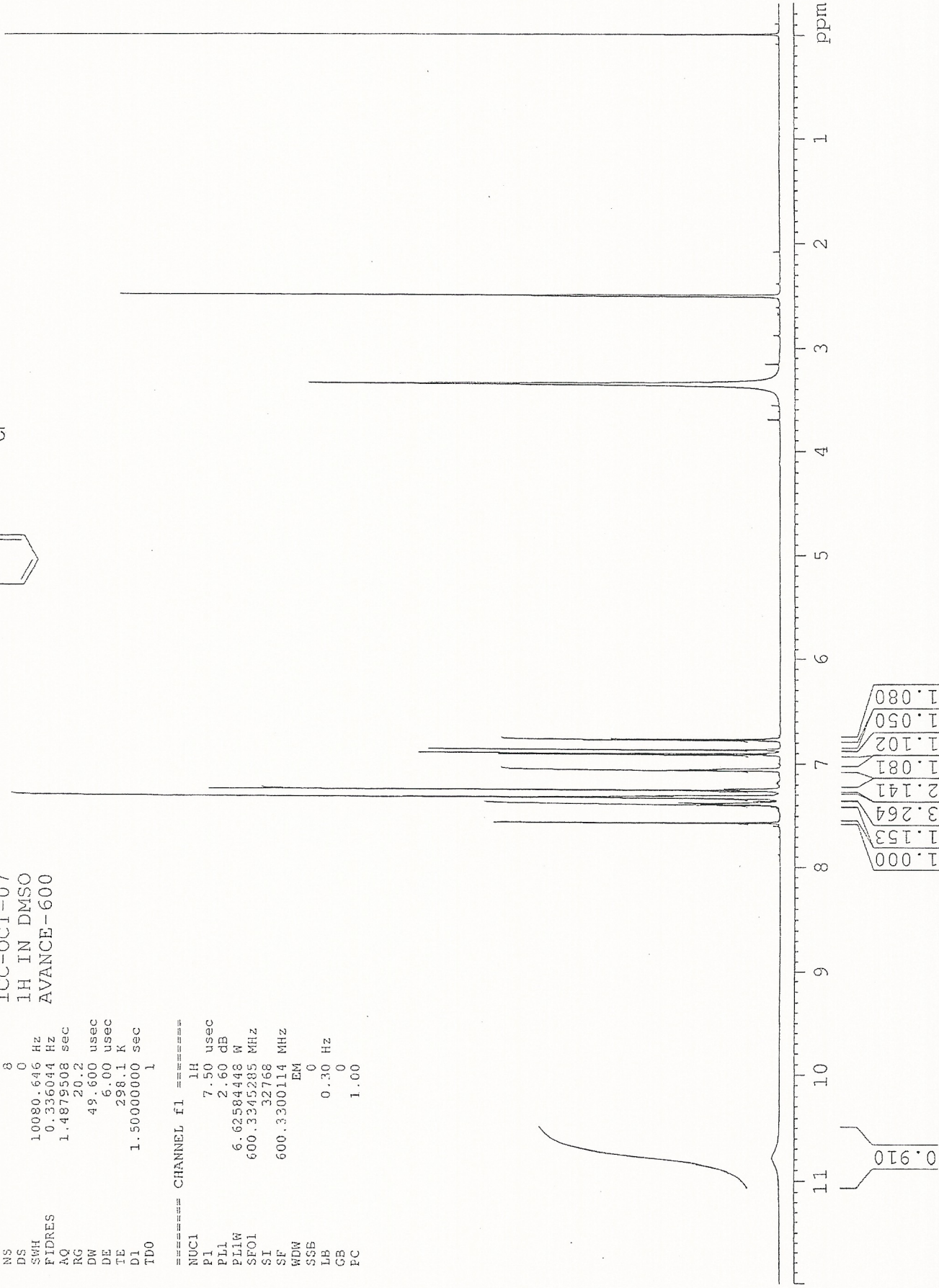
Catalog no.: 19-097  
 Product name: 3(2',4'-Dichlorophenyl)-7-hydroxy-4-phenylcoumarin  
 Lot No.: 99052



SOLVENT DMSO 8  
 NS 0  
 DS 0  
 SWH 1.0080.646 Hz  
 FIDRES 0.336044 Hz  
 AQ 1.4879508 sec  
 RG 20.2  
 DW 49.600 usec  
 DE 6.00 usec  
 TE 298.1 K  
 D1 1.50000000 sec  
 TD0 1

ICC-OCT-07  
 1H IN DMSO  
 AVANCE-600

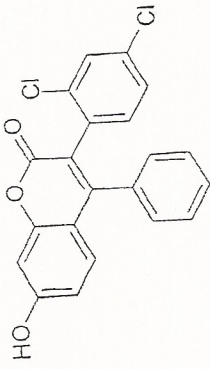
==== CHANNEL f1 =====  
 NUC1 1H  
 P1 7.50 usec  
 PL1 2.60 dB  
 PL1W 6.62584448 W  
 SFO1 600.3345285 MHz  
 SI 32768  
 SF 600.3300114 MHz  
 WDW EM  
 SSB 0  
 LB 0.30 Hz  
 CB 0  
 PC 1.00





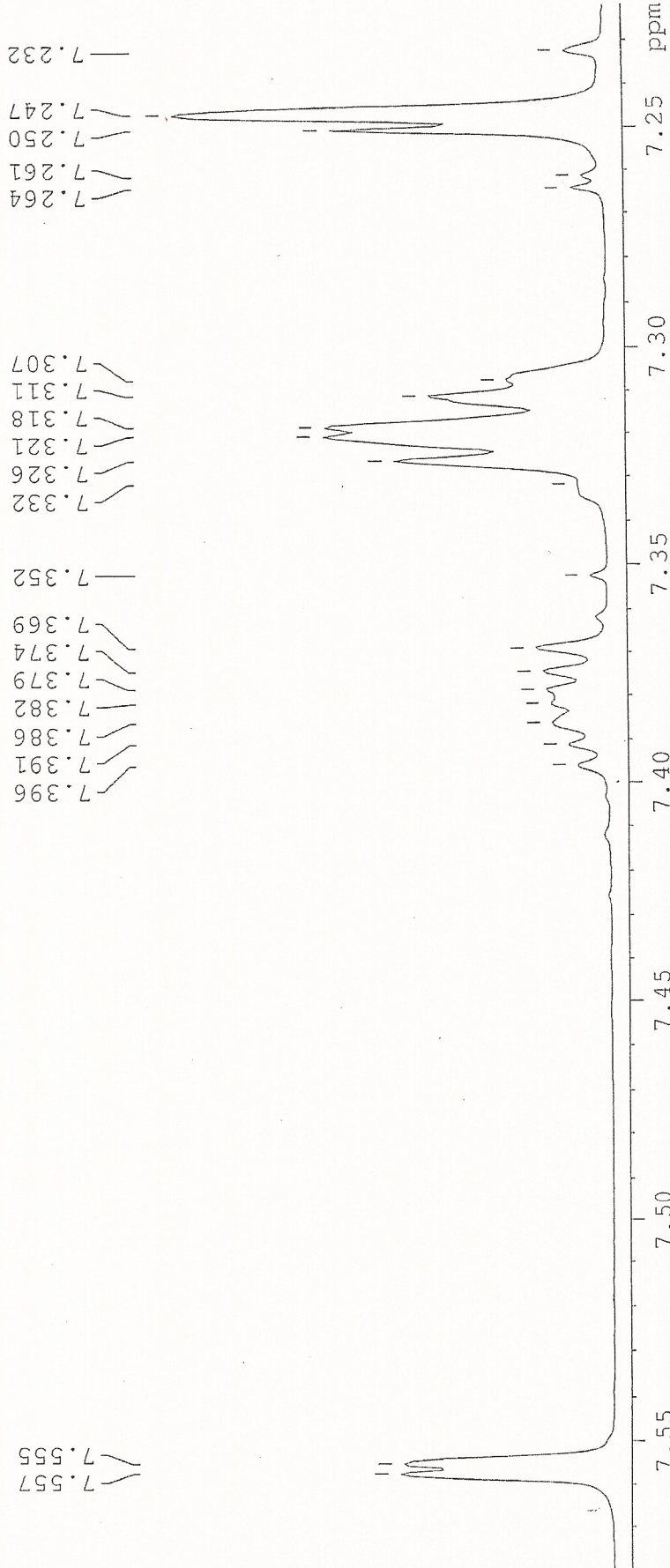
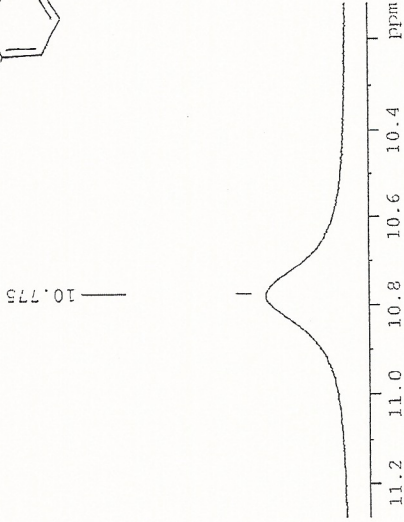
**INDOFINE Chemical Company, Inc.**  
 121 STRYKER LANE  
 BLDG. 30, SUITE 1  
 HILLSBOROUGH, NJ 08844

Catalog no.: 19-097  
 Product name: 3-(2,4-Dichlorophenyl)-7-hydroxy-4-phenylcoumarin  
 Lot No.: 99052



SOLVENT DMSO  
 NS 8  
 DS 0  
 SWH 10080.646 Hz  
 FIDRES 0.336044 Hz  
 AQ 1.4879508 sec  
 RG 20.2  
 DM 49.600 usec  
 DE 6.00 usec  
 TE 298.1 K  
 D1 1.50000000 sec  
 TD0 1

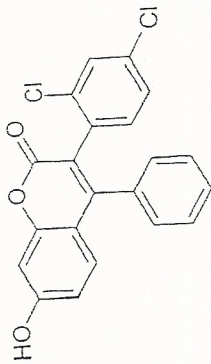
===== CHANNEL f1 =====  
 NUC1 1H  
 P1 7.50 usec  
 PL1 2.60 dB  
 PL1W 6.62584448 W  
 SF01 600.3245285 MHz  
 SI 32768  
 SF 600.3300114 MHz  
 WDW EM  
 SSB 0  
 LB 0.30 Hz  
 GB 0  
 PC 1.00





**INDOFINE Chemical Company, Inc.**  
 121 STRYKER LANE  
 BLDG. 30, SUITE 1  
 HILLSBOROUGH, NJ 08844

Catalog no.: 19-097  
 Product name: 3-(2',4'-Dichlorophenyl)-7-hydroxy-4-phenylcoumarin  
 Lot No.: 99052



SOLVENT DMSO  
 HS 8  
 DS 0  
 SMH 10080.646 Hz  
 FIDRES 0.336044 Hz  
 AQC 1.4879508 sec  
 RG 20.2  
 DW 49.600 usec  
 DE 6.00 usec  
 TE 298.1 K  
 D1 1.50000000 sec  
 TD0 1

ICC-OCT-07  
 1H IN DMSO  
 AVANCE-600

==== CHANNEL f1 =====  
 NUC1 1H  
 P1 7.50 usec  
 PL1 2.60 dB  
 PL1W 6.62584448 W  
 SF01 600.3345285 MHz  
 SI 32768  
 SF 600.3300114 MHz  
 WDW EM  
 SSB 0  
 LB 0.30 Hz  
 GB 0  
 PC 1.00

7.061  
 7.056  
 7.052  
 7.048  
 7.044

6.910  
 6.896

6.863  
 6.859

6.773  
 6.770  
 6.759  
 6.755

